Thomas E. Wellems, M.D., Ph.D.
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Dr. Wellems' research interests are in drug responses, immune evasion, and pathogenesis of malaria, including: (1) antimalarial drug resistance and factors that affect clinical outcome after treatment; (2) malaria protection conferred by human hemoglobinopathies and other red cell polymorphisms; (3) antigenic variation by *Plasmodium falciparum* parasites; (4) molecular mechanisms of malaria parasite infectivity and pathogenesis. His major reports include first descriptions of the *Pf*CRT transporter responsible for chloroquine resistance in *Plasmodium falciparum* malaria (2000); the *var* gene family responsible for antigenic variation and immune evasion by *Plasmodium falciparum* parasites (1995); and of a molecular mechanism for malaria protection by hemoglobin C (2005). Other primary reports from his program provide original descriptions of a protein sequence for use in rapid diagnostic test kits to detect *P. falciparum* infection (*Pf*HRP II, 1986); dihydrofolate reductase mutations responsible for pyrimethamine resistance in malaria (1998; 1990); DNA transformation of *P. falciparum*- and *P. vivax*-infected erythrocytes (1995, 1996, 2014); a high-resolution genetic map of *P. falciparum* (1999); and a previously uncharacterized *Pf*RH5-mediated pathway of *P. falciparum* infection in *Aotus* monkeys (2008).

Dr. Wellems received his M.D. and Ph.D. from the University of Chicago. Following an internal medicine residency at the Hospital of the University of Pennsylvania, he joined the US National Institutes of Health NIAID Division of Intramural Research, where he serves today as an NIH Distinguished Investigator and Chief of the Laboratory of Malaria and Vector Research. Dr. Wellems is a member of the U.S. National Academy of Sciences and Institute of Medicine, is a former president of the American Society of Tropical Medicine and Hygiene, and has served on a number of advisory committees for foundations and public-private partnerships, including the Medicines for Malaria Venture. Among his great career satisfactions have been the health impact of his work in the field with overseas collaborators and the independent careers of scientists he has mentored and who are now successful faculty with their own research programs.